Proposition 204 Drainage Program FY 2002-2003 Projects - Oversight Committee Decision

#	Investigator, Organization	Title	Objective(s)	2002-03 Proposed Budget	2002-03 Running Total	2003-04 Proposed Budget	2003-04 Running Total	2004-05 Proposed Budget	2004-05 Running Total	All Years Proposed Budget	All Years Running Total
Approved Projects											
7	Sharon E. Benes, Dept. of Plant Science, CSU Fresno	Suitability Assessment of Salt Tolerant Forages and a Halophyte for Sequential Drainage Water Reuse Systems: Plant Water Use (ET), Forage Quality, and Productivity.	Evaluate cumulative water use (ET) for the two salt tolerant forages ranked highest in the Riverside sand tank study (Jose Tall Wheatgrass and Ameristand 801S Alfalfa) with comparision to a standard reference grass. Evaluate cumulative water use (ET) for additional salt tolerant forages (bermuda grass, paspalum, and creeping wild rye with comparision to a astandard reference grass.)	$45,015	$45,015	$45,015	$45,015		$0	$90,030	$90,030
9	William T. Frankenberger, University of California Riverside. Contact: David Cone, General Manager, Broadview Water District	Removal of selenium from Drainage water in lined reduction and open oxidation channels: a field study.	Site renovation/relocation. Explore and evaluate disposal options. Create a high salinity environment for testing of high salinity bacteria species. Develop an economic model for feasibility of the treatment program.	$61,900	$106,915	$38,100	$83,115		$0	$100,000	$190,030
11	Doug Davis, Tulare Lake Drainage District	Feasibility Determination and Design of a Wintering Waterfowl Wetland Habitat Using a Low-Selenium Saline Agricultural Drainage Water Supply.	Develop biological design criteria for wintering waterfowl wetland habitat. Application of the wintering waterfowl design criteria to develop a site-specific engineered design concept for a 300-acre wetland located within the northern portion of the TLDD service area.	$60,000	$166,915	$60,000	$143,115		$0	$120,000	$310,030
3	Nigel W.T. Quinn, Berkeley National Laboratory. Contact: John Sweigard, Manager, Patterson Water District	Impacts of drainage re-use on water district salinity budgets: a case study of two west-side irrigation water districts.	To compare and contrast salinity mass balance on two progressive water districts in the San Joaquin basin that are taking different approaches to district level salinity management. The goal is to assess the consequences of a total water reuse management strategy such as proposed by the Patterson WD to more traditional practices represented by the West Stanislaus ID.	$69,500	$236,415	$51,500	$194,615		$0	$121,000	$431,030
17	Jose I. Faria, California Dept. of Water Resources	Application and Feasibility of Salinity Gradient Solar Pond Technology in San Joaquin Valley, California Salt Gradient Solar Pond in the San Joaquin Valley. Second Phase.	Proceed with the the conclusions and recommendations (second phase) described or the Conceptual Application and Feasibility of Salinity Gradient Solar Pond Technology in San Joaquin Valley, California Report.	$135,000	$371,415	$45,000	$239,615		$0	$180,000	$611,030
6	Kurt Kovac, California Dept. of Water Resources	Drainage Water Irrigation Monitoring for an Integrated on-Farm Drainage Management Component at Red Rock Ranch, Fresno Co.	DWR will continue to monitor groundwater and applied water. This past year, DWR has initiated a program to measure soil moisture and soil density in the eucalyptus tree and halophyte areas.	$65,000	$436,415	$65,000	$304,615	$65,000	$65,000	$195,000	$806,030
12	Gary Banuelos, USDA-ARS-Water Management Research Laboratory	Developing biofuel and selenium-enriched forage from canola irrigated with selenium-laden drainage waters on the west side of central California	The overall objective of this study is to demonstrate a vegetative method of drainage water volume reduction at different field sites on the Westside of the San Joaquin Valley, while producing two viable products from planting canola – biofuel and Se-enriched forage.	$65,500	$501,915		$304,615		$65,000	$65,500	$871,530
Conditionally Approved Projects											
13	Bryan Jenkins, Zhongli Pan, Ruihong Zhang, Dept. of Biological and Agricultural Engineering, University of California, Davis	Characterization and Utilization of Saline Biomass	Develop and transfer the appropriate processing technologies, products, and utilization procedures of saline biomass that are determined and/or developed through this research to farm and industries in the San Joaquin Valley utilizing the saline biomass for energy and producing value-added products.	$91,849	$593,764	$66,421	$371,036	$64,677	$129,677	$222,947	$1,094,477
14	Kenneth K. Tanji and Suduan Gao, Dept. of Land, Air and Water Resources-Hydrology Program, University of California, Davis	Selenium Mass Balance and Modeling in Agricultural Evaporation Basins	Develop a mass balance on water and Se within the cells of Tulare Lake Drainage District's South Evaporation Basin (moderate Se inlet water) and Lost Hills Water District's Pond 1 or 2 (high Se inlet water) by quantifying Se transformations, partitioning into compartments, and transport.	$67,500	$661,264	$67,500	$438,536	$67,500	$197,177	$202,500	$1,296,977

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18	Ernest Taylor, California Dept. of Water Resources	San Joaquin River Real-time Water Quality Management Program -Operation and Maintenance of Real-time Stations	To facilitate the control and timing of wetland and agricultural drainage to coincide with periods when dilution flow is sufficient to meet Vernalis salinity objectives. By increasing the frequency of meeting Vernalis EC objectives, the project may reduce the number and/or magnitude of high quality releases.	$87,226	$748,490		$438,536		$197,177	$87,226	$1,384,203
16	Kurt A. Schwabe, Dept. of Environmental Sciences, University of California Riverside	An Economic Analysis of Solar Evaporators and Evaporation Ponds	A comparative economic analysis of implementing an evaporation pond versus a solar evaporator. An evaporation pond entails standing water in a pond, whereas a solar evaporator entails water discharged at a rate equal to the evaporation rate to eliminate standing water.	$20,517	$769,007	$15,679	$454,215			$36,196	$1,420,399
Total Approved and Conditionally Approved Projects				$769,007		$454,215		$197,177		$1,420,399	$1,420,399